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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,917	10/14/2003	Daniel John Smith	1171/39464B/99B-CIP	3561

279 7590 10/02/2006

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CHICAGO, IL 60603

EXAMINER

PATEL, NIHIR B

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/684,917		SMITH ET AL.	
	Examiner		Art Unit	
	Nihir Patel		3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10.14.2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 12 is/are rejected.
- 7) ☒ Claim(s) 8-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12.08.2003</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims **1, 3 through 7 and 12** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims **1 through 6 and 10** of U.S. Patent No. 6,662,802. Although the conflicting claims are not identical, they are not patentably distinct from each other because it is clear that all the elements of claim 1 of the current application can be found in claim 1 of patent ‘802. Clearly the term “electric insulating layer” in lines 3 of claim 1 of the current application in a broad sense is defined as a “hydrophobic insulating layer” used in claim 1 of patent ‘802. The difference between claim 1 of the current application and claim 1 of patent ‘802 lies in the fact that claim 1 of patent ‘802 includes many more elements and is thus much more specific. Thus claim 1 of patent ‘802 is in effect a “species” of the “generic” claim 1 of the current application. It has been held that the generic invention is “anticipated” by the

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“species”. See *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993). Since claim 1 of the current application is anticipated by claim 1 of patent ‘802, it is not patentably distinct from claim 1 of patent ‘802. **With respect to claim 3 of the current application**, the limitations can be found in claim 2 of patent ‘802. **With respect to claim 4 of the current application**, the limitations can be found in claim 3 of patent ‘802. **With respect to claim 5 of the current application**, the limitations can be found in claim 4 of patent ‘802. **With respect to claim 6 of the current application**, the limitations can be found in claim 5 of patent ‘802. **With respect to claim 7 of the current application**, the limitations can be found in claim 6 of patent ‘802. **With respect to claim 12 of the current application**, the limitations can be found in claim 10 of patent ‘802.

3. Claims **1 and 2** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,769,431 in view of Makin (US 4,686,354). **With respect to claim 1 of the current application**, claim 1 of patent ‘431 discloses all the features of claim 1 of the current application with the exception of providing a heating element covered with an inner electrical insulating layer. Makin discloses an apparatus that does provide a heating element covered with an inner electrical insulating layer. Therefore it would have been obvious to modify patent ‘431 by providing a heating element covered with an inner electrical insulating layer as taught by Makin in order for the device to be controlled to safe operating temperatures during a period of no gas flow.

4. Claims **1 and 3** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims **1 and 3** of copending Application No. 10/649,938 in view of Makin (US 4,686,354). **With respect to claim 1 of the current application**, claim 1 of copending application ‘938 discloses the features of claim 1 of the

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current application with the exception of providing of providing a heating element covered with an inner electrical insulating layer. Makin discloses an apparatus that does provide a heating element covered with an inner electrical insulating layer. Therefore it would have been obvious to modify copending application '938 by providing a heating element covered with an inner electrical insulating layer as taught by Makin in order for the device to be controlled to safe operating temperatures during a period of no gas flow. **With respect to claim 3 of the current application**, the limitations can be found in claim 3 of copending application '938.

5. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/622,755 in view of Makin (US 4,686,354). **With respect to claim 1 of the current application**, claim 1 of copending application '755 discloses all the features of claim 1 of the current application with the exception of providing a heating element covered with an inner electrical insulating layer. Makin discloses an apparatus that does provide a heating element covered with an inner electrical insulating layer. Therefore it would have been obvious to modify copending application '755 by providing a heating element covered with an inner electrical insulating layer as taught by Makin in order for the device to be controlled to safe operating temperatures during a period of no gas flow.

This is a provisional obviousness-type double patenting rejection.

Allowable Subject Matter

6. Claims 8-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

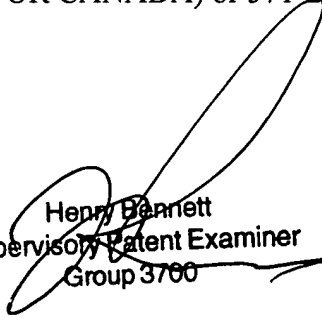
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nihir Patel whose telephone number is (571) 272-4803. The examiner can normally be reached on 7:30 to 4:30 every other Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on (571) 272-4791. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nihir Patel


Henry Bennett
Supervisory Patent Examiner
Group 3700